

CLAIMS

1. A double-stranded RNA composed of sense- and antisense-strand RNAs, homologous to a certain sequence targeted against a huntingtin mRNA, which can inhibit huntingtin gene expression.
2. The double-stranded RNA according to claim 1, wherein the certain sequence targeted against a huntingtin mRNA comprises an RNA derived from a base sequence shown in SEQ ID NO: 1 in the sequence listing.
3. The double-stranded RNA according to claim 1 or claim 2, wherein the certain sequence targeted against a huntingtin mRNA is a base sequence composed of 19 to 24 base pairs.
4. The double-stranded RNA according to any one of claims 1 to 3, wherein the RNA derived from the base sequence shown in SEQ ID NO: 1 is an RNA derived from a region at immediately upstream of CAG repeats of exon 1 of a huntingtin gene.
5. The double-stranded RNA according to any one of claims 1 to 4, wherein the RNA derived from a region at immediately upstream of CAG repeats of exon 1 of a huntingtin gene is composed of base sequences shown in SEQ ID NOs: 3 and 4 in the sequence listing.
6. The double-stranded RNA according to claim 1, composed of a base sequence wherein one or few bases are deleted, substituted, or added in a base sequence shown in SEQ ID NO:

3 in the sequence listing, and the complementary base sequence thereof.

7. The double-stranded RNA according to any one of claims 1 to 6 prepared from synthesized sense- and antisense-strand RNAs.

8. The double-stranded RNA according to any one of claims 1 to 6, which is prepared from sense- and antisense-strand RNAs generated by using gene recombination.

9. The double-stranded RNA according to claim 8, wherein the sense- and antisense-strand RNAs generated by using gene recombination are prepared by obtaining RNAs which are generated by introducing a expression vector incorporated DNA capable of transcribing respectively the RNAs, into a host cell.

10. A huntingtin gene expression inhibitor composed of the double-stranded RNA according to any one of claims 1 to 9.

11. A huntingtin gene expression inhibitor composed of a fusion product, wherein the double-stranded RNA according to any one of claims 1 to 9 is added to a TAT sequence, a protein transduction domain derived from HIV-1.

12. A huntingtin gene expression inhibitor composed of a complex formed from the double-stranded RNA according to any one of claims 1 to 9 and a positively-charged ribosome/lipid.

13. A huntingtin gene expression inhibitor composed of an expression vector incorporating a DNA capable of transcribing

the double-stranded RNA according to any one of claims 1 to 6.

14. A method for suppressing the expression of a huntingtin gene in a living body or living cell of a mammal, wherein the huntingtin gene expression inhibitor according to any one of claims 10 to 13 is introduced into a living body or living cell of a mammal.

15. A preventive and/or a remedy of Huntington's disease containing the huntingtin gene expression inhibitor according to any one of claims 10 to 13 as an effective ingredient.

16. The preventive and/or the remedy of Huntington's disease according to claim 15 further containing a pharmaceutically acceptable carrier.

17. A method for preventing the development and/or treatment for Huntington's disease, wherein the preventive and/or the remedy of Huntington's disease according to claim 15 or 16 is introduced into a living body or living cell of a mammal.